May Wang

(+86) 188 · 1821 · 2442 ◇ Mary1994@sjtu.edu.cn
IEEE student member ◇ http://maywang-sjtu.github.io

EDUCATION

Shanghai Jiao Tong University *Sept 2012 - June 2016*
B.S. in Electronics and Electric Engineering & Minor in Computer Science
IEEE Pilot Class, Overall GPA: 3.64 / 4.3, Rank: 14/78

RESEARCH WORKS

[1] **M. Wang**, Z. Zhang, X. Tian, X. Wang, **"Temporal Correlation of the RSS Improves Accuracy of Fingerprinting Localization"**, submitted to *Proc. IEEE INFOCOM*, 2016.

[2] Z. Zhang, **M. Wang**, D. Liu, X. Tian, X. Wang, **"Squeeze More from the Fingerprints Reporting Strategy for Indoor Localization"**, submitted to *Proc. IEEE INFOCOM*, 2016.

RESEARCH EXPERIENCE

Undergraduate member of **Research Center of Intelligent Internet of Things** (IIoT).
Supervised by **Prof. Xinbing Wang & Prof. Xiaohua Tian**.

How Temporal Correlation of RSS improves the Accuracy of Indoor Localization 3/2015 - present
*Main Researcher * Indoor localization*

- Modeling a theoretical framework on fundamental limits of localization like accuracy and reliability considering the temporal correlation of signal.
- Explaining how temporal correlation of signals can correct the localization criteria for MLE method by theoretical derivation and scientific calculation.
- Dimension Reduction Derivation to analysis the high dimensional situations in Sample space and Physical space.
- Experimental results corroborate the theoretical analysis.

User-behavior based Optimization Methodology for CloudNFV Network 5/2015 - present
*Research group leader * Cellular Network*

- Build up the traffic model for substantial mobile stations in communication cellular network.
- Optimize the resource allocation mechanism in details on network function virtualization framework by linking the user states and EPC nodes.
- Adaptive and dynamic algorithm design for capacity improvement in this typical framework.

Location Based Services System Development cooperating with Foxconn 7/2015 - present
*iOS development team leader * iOS Indoor Localization System*

- The iOS application developed for indoor localization includes RSS scanning, Map displaying, Pedometer, Information management as well as Sever communication components.
- The localization determination algorithms both contain online figerprint based method and offline gradient descent method.

Dallas Cooperation Project of Ericsson and IWCT SJTU 7/2014 - 3/2015
*Core member * Communication System*

- Renovating the traffic model as state machine for user activities in WCDMA network component.
- Writing a simulation software by C++ to model the stability distribution of user behavior in 3GPP communication network.
- Simulating the traffic packages and user activity translation by MATLAB.

Crowdsourcing based Lane-level Vehicular Localization utilizing Smartphones 9/2014 - 1/2015
*Member * Intelligent Transportation*

- The system designed as Client/Server model to facilitate the travel programming of the pilotless automobile and high precision vehicle navigation.
- Leveraging the sensors in smartphone like accelerator and gyroscope as well as GPS module, integrated through IMM filter to find the trajectory of vehicles.
- Determining number of lanes of the road and classify the location by k-means clustering algorithm.

ACADEMIC PROJECTS & COMPETITIONS

Identification, Analysis and Warning for Large Pedestrian Flow in Urban Areas 6/2015 - present
*Responsible person * 2015 3rd Chun-Tsung Program of SJTU*

· Creating the dynamic model for large pedestrian flow with consideration of variety of factors and building a network architecture model for urban areas.
· Warning the peak flow and providing evacuation measures. Forecast the key value to form a mutation by time-domain simulation. On account of the situation of congestion, combine network topology of the road, propose the efficient measures for diverse the flow.
· Verification the model and algorithms by using Legion pedestrian simulation system in some typical regions.

A Map-Generating and Speed Optimizing Driving System 11/2014 - present
*Member * The 7th University Innovative Participate Program in Shanghai*

· In this hackathon party only opened for girl engineers, our group developed an Android app named as "Love Drop", which is a game application for lovers.
· There are three main functions – the love tree cultivation, the beat vent tool game, and a log history for dairy.
· Finally our group got the first prize in the competition.

"LoveDrop" Android Application 5/12/2014 - 7/12/2014
*Member * 2014 Google Girls Hackathon Party*

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AWARDS & SCHOLARSHIPS

- Fan Xuji Scholarship (Top 5%) 2013,2014
- Pan Wenyuan Scholarship (Top 5%) 2013
- Academic Excellence Scholarship (Type B) of SJTU (Top 10%) 2013,2014
  - Excellent Student of SJTU 2013
  - Excellent League Member of SJTU 2014
- Third Tsien Hsueshen Cup College Students technological innovation contest 5/2015
- Awarded first prize Google Girls Hackathon Party 12/2014
- Awarded the third prize of the fifth PRO-FACE Man-machine interface programming contest 12/2012

EXTRACURRICULAR ACTIVITY

Student Organizations / Interest Clubs 9/2012 - 9/2014
Director / Secretary

· Director of Organization Department of Community Committee in SEIEE
· Member of the student union of SEIEE / Young Volunteer team of SJTU during the freshman year
· Member of College Women Basketball Team / Xizhou Guqin Society / Student Choir of SJTU / English Cornor
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Volunteering 9/2012 - 9/2015
Team member

· Volunteer in Shanghai Railway Station, Freshman welcoming procedure, Wujing Social Environment-friendly publicity, Shanghai International Marathon, Shanghai Science and Technology Museum. Blood donation.

TECHNICAL STRENGTHS

Computer Languages: C++, Python, JAVA, Erlang, Android, iOS, LabVIEW, Matlab

English Ability: TOEFL 101 (Reading 28, Listening 26, Speaking 23, Writing 24); GRE